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Maintenance

HANGAR / BUILDING DOOR OPERATIONS

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This instruction implements Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance* and is applicable to all 445th Airlift Wing personnel. This instruction establishes hangar/building powered and non-powered door operator and awareness training.

1. Responsibilities:

1.1. Operators of hangar/building doors, including but not limited to; manual, powered, fold-up, counterbalanced, and roll-up hangar doors (not personnel doors) will be thoroughly familiar with operating instructions, precautions (i.e., operating controls, pinch points, crush hazards, etc.), and Protective Personnel Equipment (PPE) as necessary for safe operation. Operators will consider all hazards associated with door operations, such as aperture openings, counter weight mechanisms, moveable/non-moveable obstructions, cables/pulley mechanisms, etc.

1.2. Hangars/Buildings identified will include 4012, 4014, 4020, 4021, 4022, 4024, 4026, 4028, 4034, 4035, 4042, 101 and 13.

1.3. Supervisor will be knowledgeable of all OSHA Standards, AFOSH Standards, Technical Orders, and Air Force Instructions applicable to all hangar door operations and ensure personnel are educated on safe operations, proper lockout/tagout procedures, and training required.

1.4. Powered hangar door operators will be qualified and approved by the Maintenance Group Commander (MXG/CC). Authorization letters for all qualified personnel will be posted next to the door operating control panel.

1.5. Supervisors are responsible for providing an annual operation and awareness training for all personnel required to operate doors. Also, supervisors are responsible for conducting an annual awareness (non-operators) training for all personnel who routinely work in hangar facilities, regardless of AFSC or duties (Admin Personnel, etc.). Awareness training will utilize developed lesson plans as stated in item **3.3**.

1.6. Real Property Building Managers (RPBM) will include an operational check of all hangar doors during their monthly inspections IAW WPAFBPAM 32-2, *Real Property Building Manager (RPBM)*, paragraph 9.2. Should the RPBM become aware of an unsafe condition through i.e., monthly inspections, individual notifications, supervisor safety surveillances, wing safety, corrective action must be initiated. All guidelines for corrective action will be IAW WPAFBPAM 32-2. RPBM will provide a courtesy copy of the AF Form 1118, **Notice of Hazard**, to the Quality Assurance Office when Risk Assessment Codes (RAC) 1, 2, and 3 have been assigned by the Wing Safety office for all hangar doors.

2. Hangar/Building Door Training Requirements:

2.1. Training will be conducted at the hangar/building door location.

2.2. Powered hangar/building doors will utilize the developed procedures (**Attachment 2** for training personnel in building 4026. Training will include academic and practical performance demonstration. **NOTE:** Any changes to the powered hangar/building door operations (i.e. approved modifications, etc.) affecting door operation procedures will require written or electronic notification to Wing Safety and the Quality Assurance (QA) offices. QA will revise lesson plans and operation requirements. Powered hangar doors will not be operated until all personnel receive the revised operator and awareness training approved through the Quality Assurance office.

2.3. Manual, roll-up, counterbalanced, and fold-up hangar/building doors will utilize a developed lesson plan created by the RPBM for each respective hangar/building. Developed lesson plans will be forwarded to the Quality Assurance for approval before training personnel and forwarded to Maintenance Group training. Lesson plans will include date developed, supervisor name, RPBM name, hangar/building number, type of door, and lesson content.

2.4. All training regardless of door type will be initially documented in the employees AF Form 55, **Employee Safety and Health Record** and AF Form 797, **Job Qualification Standard Continuation/Command**, for non-maintenance personnel. All automated maintenance management system (G081) requirements and course code documentation will be as follows:

2.4.1. Initial Hangar Door Operator (Course code WPAT 000080) – Frequency: 0

2.4.2. Annual Hangar Door Operator (Course code WPAT 000090) – Frequency: 12

2.4.3. Hangar Door Awareness Course (Course code WPAT 000070) - Frequency: 12

3. Powered Sign Requirements:

3.1. Powered hangar door signs will meet minimum requirements established in AFOSHSTDS 91-100, *Aircraft Flightline-Ground Operations And Activities*, and 91-501, *Air Force Consolidated Occupational Safety Standard*.

3.2. Powered hangar door danger signs must be mounted next to all powered hangar door controls. Any deviation to this requirement will be addressed through Wing Safety and Quality Assurance offices for approval.

3.3. Powered hangar doors will use a danger sign with dimensions of 7" X 10" and color scheme that will be IAW AFOSHSTD 91-501, paragraph 21.4.4.5. The word "DANGER" must be printed on top 1 7/16" white font and message below which must contain the following statement using black font, "Only qualified personnel authorized by the MXG commander may operate hangar doors." The bot-

tom of the sign must have reference to AFOSH Std. 91-100, "IAW AFOSHSTD 91-100, paragraph 7.2.3.4."

4. Identification Of Hazards:

4.1. All manual, fold-up, counterbalanced, and roll-up hangar door identification of hazard requirements will be addressed on a case-by-case basis through the RPB, Wing Safety and the Quality Assurance offices. The requirements for these doors will meet AFOSH & OSHA standards. Any areas suspected outside of the requirements needing to be strengthened will utilize the Operational Risk Management (ORM) program.

4.2. Powered hangar doors and door wells hazard identification will be marked to ensure no one enters the door during operations for potential pinch point and crush areas and as a minimum will meet the following requirements established IAW AFOSHSTD 91-501 and 91-100.

4.2.1. A five-foot minimum clear zone will be established for powered hangar doors and door wells with a three-inch wide yellow and black striped line. The clear zone is five foot on either side of the hanger door area.

4.2.2. The area inside the clear zone must have identical diagonal lines.

4.2.3. All sides visible when approaching hazardous area must have a fourteen-inch by twenty-inch "DANGER" sign painted on the floor just outside the lined area.

4.2.4. The sign will be placed so that it can be read when approaching the hazardous area. "DANGER" must be printed on top with a 2 7/8" white font. The message below "DANGER" must contain the following statement, "HAZARDOUS AREA – STAND CLEAR DURING DOOR OPERATIONS."

5. Control Panel Markings: All powered hangar and roll-up doors will have luminescent or reflective directional arrows placed adjacent to each switch to indicate the direction of door travel for each corresponding switch.

6. Hanger Door Procedures: All powered hangar doors will have an operating checklist posted at each hangar door control panel to include step-by-step procedures and list the name of the RPB.

HANFERD J. MOEN JR., Brig Gen, USAFR
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 21-101, Aircraft Maintenance Guidance and Procedures

AFOSH 91-66, General Industrial Operations

AFOSH 91-100, Aircraft Flightline-Ground Operations And Activities

AFOSH 91-501, Air Force Consolidated Occupational Safety Standard

Attachment 2

POWERED HANGAR DOOR OPERATION PROCEDURES BLDG 4026

Real Property Building Manager (RPBM) –TSgt Dave Hueston

(REF: AFOSH STD 91-100 & 445AWI 21-108)

1. Authorized Personnel Only will operate the powered hangar door located on the east end of the building.
2. Before Operating:
 - 2.1. Check that service (personnel) doors are not ajar.
 - 2.2. Check that all personnel are cleared from the operating door and track area.
 - 2.3. Check that the air line from the permanent regulator from the T-Tail stand is clear of the operating tracks.
 - 2.4. Check that all power cables extending from the north & south outside walls to the T-Tail stand are clear from the operating tracks.
 - 2.5. Ensure all operators are wearing required protective hearing protection.
 - 2.6. Ensure all operators are wearing required protective safety toe shoes.
3. Opening hangar doors:
 - 3.1. Perform before operating checks prior to any hangar door movements.
 - 3.2. Depress **Green** button to open doors.
 - 3.3. Alarm will sound and caution light will illuminate.
 - 3.4. Release to stop. **NOTE:** Do not ride on doors during operation. Ensure ten foot minimum clearance between north and south doors when partially opened.

4. Closing hangar doors.

4.1. Perform before operating checks prior to any hangar door movements and ensure all personnel are clear.

4.2. Depress two **Red** buttons to close doors.

4.3. Alarm will sound and caution light will illuminate.

4.4. Release to stop. **NOTE:** Do not ride on doors during operation.